

# UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NA	MED INVENTOR		ATTORNEY DO	CKET NO.
09/067,795	04/28/98	DOVEK		M	3123-276	
C 022442 SHERIDAN ROSS PC				EXAMINER		
		WM01/1219	<i>,</i>	LETSCHER,G		
1560 BROADWAY				ART UNIT	PAPER	NUMBER
SUITE 1200 DENVER CO 80	)202			2652 DATE MAILED	:	18
					12/19/0	0

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 



	Application No. 09/067,795	Applicant(s)	Dovek et al		
Office Action Summary	Examiner George Lets	scher			
Responsive to communication(s) filed on <u>Oct 3, 2</u>	000			·	
] This action is <b>FINAL</b> .					
Since this application is in condition for allowance in accordance with the practice under Ex parte Qu			on as to the me	erits is closed	
A shortened statutory period for response to this acti s longer, from the mailing date of this communication pplication to become abandoned. (35 U.S.C. § 133 37 CFR 1.136(a).	n. Failure to respond with	nin the perio	d for response	will cause the	
Disposition of Claims					
X Claim(s) <u>1-60</u>		is/are	pending in the	application.	
Of the above, claim(s)					
Claim(s)					
X Claim(s) 1-60					
Claim(s)				to.	
Claims					
<ul> <li>The drawing(s) filed on is</li> <li>The proposed drawing correction, filed on</li> <li>The specification is objected to by the Examine</li> <li>The oath or declaration is objected to by the Examine</li> </ul>	is 🗋 a er.		disapproved.		
Priority under 35 U.S.C. § 119		C 6 110/->	(-)		
Acknowledgement is made of a claim for foreig     All Some* None of the CERTIFIE					
received in Application No. (Series Code	/Serial Number)				
received in this national stage application *Certified copies not received:		ureau (PCT I	Rule 17.2(a)).	·	
Acknowledgement is made of a claim for dome	estic priority under 35 U.S	S.C. § 119(e	e).		
Attachment(s)					
Notice of References Cited, PTO-892					
Information Disclosure Statement(s), PTO-144	9, Paper No(s)				
<ul> <li>Interview Summary, PTO-413</li> <li>Notice of Draftsperson's Patent Drawing Revie</li> </ul>	w. PTO-948				
Notice of Informal Patent Application, PTO-152					
SEE OFFICE AC	CTION ON THE FOLLOWING	G PAGES			

## Election/Restriction

1. The restriction requirement has been withdrawn. Rejections of claims 20 and 38-41 follow.

#### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 7, 10, 11, 13-15, 17-19, 21, 24-27, 29-34, 37, 42-50, 53, 55, 57, 58 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (U.S. Patent 5,486,967) for the reasons set forth in the Office action dated April 29, 1999.

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2652

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hesterman et al (U.S. Patent 5,434,733) in view of Hamilton (U.S. Patent 4,423,450).

With regard to claims 1-19, 21-37 and 42-60, Hesterman et al in view of Hamilton shows all the features except for the detector being a PR4 detector or a peak detector. Official Notice is taken that it is notoriously old and well known in the art to use a PR4 detector or a peak detector to detect a Lorentzian-shaped pulse. Applicant even admits that these detectors are old and well known on pages 22 and 23 of the specification. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the magnetic recording system of Hesterman et al in view of Hamilton with either a PR4 or peak detector. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to provide the magnetic recording system of Hesterman et al in view of Hamilton with either a PR4 or peak detector so that the system can read the

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Lorentzian-shaped pulse that is produced from the head of Hesterman et al in view of Hamilton.

With regard to claims 39-41, the pulses received from the magnetoresistive element of Hesterman et al in view of Hamilton will already be substantially Lorentzian-shaped pulses since the head is a flux-quided MR head that is reproducing perpendicular recording media. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the device of Hesterman et al in view of Hamilton devoid of all signal processing circuitry between the magnetoresistive read element and the detector. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to make the device of Hesterman et al in view of Hamilton devoid of all signal processing circuitry between the magnetoresistive read element and the detector since the pulses received from the magnetoresistive element are already substantially Lorentzian-shaped pulses.

With regard to claims 20 and 38, Official Notice is taken that high pass filters are old and well known in the art to remove lower frequencies. One of ordinary skill in the art would recognize that passing the substantially Lorentzian-shaped pulses of Hesterman et al in view of Hamilton through a high pass filter would make the signal more of an ideal Lorentzian shape by

removing the lower frequencies. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to pass the pulses received from the magnetoresistive element of Hesterman et al in view of Hamilton through a high pass filter. The rationale is as follows: One of ordinary skill in the art at the time of the invention would have been motivated to pass the pulses received from the magnetoresistive element of Hesterman et al in view of Hamilton through a high pass filter so that the lower frequencies are removed and the pulses are closer to the ideal Lorentzian shape. Claim 55 is rejected under 35 U.S.C. 103(a) as being 4. unpatentable over Somers (U.S. Patent 5,097,371) in view of Hamilton (U.S. Patent 4,423,450) for the reasons set forth in the Office action dated April 26, 2000 and the reason set forth above in the immediately preceding paragraph.

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# Conclusion

5. Any inquiry concerning this communication should be directed to George Letscher at telephone number (703) 305-7912.

GEORGE J. LETSCHER PRIMARY EXAMINER

December 13, 2000